

## What is Chronic Wasting Disease (CWD)?

Chronic Wasting Disease (CWD) is a contagious neurological disease that is fatal to deer and elk. It is classified as a transmissible spongiform encephalopathy (TSE). It attacks the brains of infected animals, resulting in their becoming emaciated, exhibiting abnormal behavior, and eventually dying. Related animal diseases include scrapie, which has been identified in sheep for over 200 years, and “mad cow disease” in cattle.

## Where Has CWD Been Found?

CWD has been detected in wild or captive deer or elk in several western states and Canadian provinces, Minnesota, Illinois, and Wisconsin. Currently, Wisconsin and Illinois are the only states east of the Mississippi River where CWD is known to occur.

## Does CWD Pose a Risk to People?

Information to date from the Centers for Disease Control and the World Health Organization indicate that people, cattle and other livestock are resistant to transmission of CWD. There have been no verified cases of people getting the human form of TSE known as Creutzfeldt-Jakob Disease from exposure to CWD, even though hunters have been taking and eating deer and elk from the infected areas of Colorado and Wyoming for more than 20 years. While CWD is not known to be present in Massachusetts and appears to pose no known threat to human health, hunters can take some simple precautions to minimize possible exposure to CWD and other common wildlife diseases.

## What if I see a Deer Showing Signs of CWD?

If you observe a deer that is clearly showing symptoms of CWD, do not kill or handle the deer. Report the sighting to the nearest MassWildlife office (see phone numbers below). Report only deer showing all or most of the symptoms of CWD.

### Field Headquarters

1 Rabbit Hill Road, Westborough, Tel: (508) 792-7270

### Western Wildlife District

400 Hubbard Avenue, Pittsfield, Tel: (413) 447-9789

### Connecticut Valley Wildlife District

East Street, Belchertown, Tel: (413) 323-7632

### Central Wildlife District

Temple Street, West Boylston, Tel: (508) 835-3607

### Northeast Wildlife District

68 Harris Street, Acton, Tel: (978) 263-4347

### Southeast Wildlife District

195 Bournedale Road, Buzzards Bay, Tel: (508) 759-3406

## What Sources Exist for Further Information?

Current information concerning CWD in Massachusetts can be found at our web page [www.mass.gov/dfwele/dfw](http://www.mass.gov/dfwele/dfw) or nationally at [www.aphis.usda.gov/vs/nahps/cwd](http://www.aphis.usda.gov/vs/nahps/cwd) from the United States Department of Agriculture.

The Chronic Wasting Disease Alliance has developed a web site (<http://www.cwd-info.org>) which is acting as a national clearing house for the most up-to-date and accurate information on CWD.



**MassWildlife**

Funding provided by USDA-APHIS  
Accurate as of August 2004



Photo by: Dr. Elizabeth Williams,  
University of Wyoming

# Questions & Answers on Chronic Wasting Disease in Massachusetts



## What are the Signs of CWD in Deer?

Symptoms of CWD in deer include excessive drooling, excessive thirst, frequent urination, sluggish behavior, isolation from herd, grinding teeth, holding the head in a lowered position, poor body condition, ribs showing, and drooping ears. Sick deer may be found close to water. Please refer to the picture on the cover as an example of a sick deer.

Hunters should realize that deer are subject to a variety of illnesses and injuries that may cause unusual behavior or appearance. Please note that some of these symptoms can be seen in deer after a very severe winter when deer may appear very thin and weak, or after a deer has been struck by a vehicle. Rabies, which is rare in deer, may also produce some symptoms in similar to those associated with CWD.

## How is it Transmitted Among Cervids?

Current research indicates that CWD is not the result of a virus or a bacterial agent. It appears to be caused and transmitted in some yet unknown way via abnormal proteins called prions. These prions appear to be infectious and while it is not known for sure, it appears that the most likely modes of transmission are through physical contact, (such as nose to nose) or through infected feed. Abnormal prions tend to be most concentrated in nervous system tissue such as the brain or in lymphatic tissue such as lymph nodes in deer. Other affected tissues and organs can include the eyes, spinal cord, tonsils, pancreas and spleen. Research to date indicates that prions do not accumulate in muscle tissue and hence boned out meat appears to be safe to consume.

## Why is MassWildlife Concerned About CWD Now?

It is MassWildlife's mission to be good stewards for all native wildlife. We strive to keep wildlife populations healthy and in balance with their habitat. CWD is a serious issue. If CWD is detected in Massachusetts, it can affect the health of our wild and captive deer populations. This is why we have put strong regulations in place to prevent the disease from entering our borders.



Healthy white-tailed deer. Photo © by Bill Byrne.

## What is MassWildlife's Plan?

At the present time it is prudent to strive for the "most protective" measures possible. Specific objectives include

- 1) disease prevention
- 2) early detection and
- 3) disease control (or eradication) if the disease is found in Massachusetts.

To accomplish these objectives, MassWildlife has been working with the state Department of Agricultural Resources, the Northeast Deer Technical Committee and federal agencies. We hope to minimize the risk of CWD entering the Commonwealth by reducing the chances of a CWD-infected animal entering the state and possibly infecting our wild or captive deer. Currently, no live deer, of any species, may be brought into Massachusetts for any purpose. This ban includes animals used in deer farming practices and those used seasonally for petting zoos or holiday displays.

A surveillance and monitoring program has been developed and implemented to detect the disease as early as possible. Samples of hunter-harvested and roadkill deer from around the Commonwealth will be tested for CWD by MassWildlife biologists. Also, any deer showing symptoms of CWD will be tested.

## Advice for Hunters

There is no need for alarm as CWD has not been found in Massachusetts and has not been shown to be transmissible to humans. However, Bay State hunters field-dressing or butchering deer should take these simple precautions.

- Avoid shooting, handling or consuming a deer that appears sick.
- Wear rubber gloves when field dressing or butchering deer.
- Never eat the brain, eyes, spinal cord, spleen, or lymph nodes from deer.
- Avoid cutting through bones or the spinal column and remove all meat from the bone during butchering.
- Use a 50/50 solution of household chlorine bleach and water to disinfect tools and work surfaces.
- If you saw off antlers or through a bone, or if you sever the spinal column with a knife, be sure to disinfect those tools prior to using them for the butchering or removal of meat.
- Remove all fat and connective tissue from the meat. Note that normal field dressing and trimming of fat from meat will remove lymph nodes.
- Use caution when spreading urine based scents since it is not known if commercial deer lures and scents pose a risk of spreading CWD.

If you hunt deer or elk in other states and provinces, particularly those in which CWD has been detected, you should check with the wildlife agency in those states to see if they have any specific advice to hunters or special regulations pertaining to CWD. MassWildlife recommends that you return from your hunt with only boned-out meat, hardened antlers with a clean skull cap, hide without the head, or a fixed taxidermy mount.

Everyone should be aware that the high deer densities associated with artificial feeding create the potential for increased spread and prevalence of CWD, both from infected feed and close contact among individual deer. Deer feeding provides no benefits to deer but adds significantly to the risk that disease could be spread more quickly and widely. ***Please do not feed deer.***